

IN THE ABSTRACT**Replace the Abstract with the following:**

A method for error detection and correction (EDC) includes: generating a complete EDC code in response to a data packet; distributing the complete EDC code among the data packet to create a plurality of bytes, each including a data portion from the data packet and an EDC code portion from the complete EDC code; storing the bytes in a memory module; retrieving the bytes from the memory module; forwarding the data portions of the bytes retrieved from the memory module to a requesting device; providing the data portions of the bytes retrieved from the memory module to an EDC functional block; providing the EDC code portions of the bytes retrieved from the memory module to the EDC functional block; and performing error checking and correction in the EDC functional block upon receiving the complete EDC code from the provided EDC code portions.